What is claimed:

1. A cap for blocking the opening of a hollow fusion device defining a thru-hole, comprising:

an occlusion body sized and shaped for blocking the opening; and

an elongate anchor projecting from said occlusion body, said anchor including a first end attached to said occlusion body and an opposite second end having a lip for engaging the thru-hole, said anchor having a length which reaches from said occlusion body to the thru-hole when the cap is inserted into the opening and said lip is engaged to said thru-hole.

2. The cap of claim 1 further comprising a flange projecting from a perimeter of said occlusion body.

3. A fusion device for facilitating arthrodesis in the disc space between adjacent vertebrae, comprising:

a hollow load bearing body having an internal surface defining a chamber for an osteogenic material and an opening in communication with said chamber, said load bearing body having a length and a first diameter at a first end sized to be greater than the space between the adjacent vertebrae, said load bearing body having an outer surface with a pair of opposite cylindrical portions and a pair of substantially flat opposite side walls between said opposite cylindrical portions, said side walls extending along a substantial portion of said length of said load bearing body; and

a cap for blocking said opening, said cap having an occlusion body sized and shaped for contacting said opening, and an elongate anchor projecting from said occlusion body, said anchor including a first end attached to said occlusion body and an opposite second end having engaging means for engaging said load bearing body to hold said occlusion body within said opening.

4. The device of claim 3 wherein said outer surface defines a thru-hole in communication with said chamber and said anchor has a length which reaches from said occlusion body to said thru-hole when said cap is inserted into said opening and said lip is engaged within said thru-hole.

5. The device of claim 3 further comprising a flange projecting from a perimeter of said occlusion body.

6. A fusion device for facilitating arthrodesis in the disc space between adjacent vertebrae, comprising:

a hollow load bearing body having an internal surface defining a chamber for an osteogenic material and an opening in communication with said chamber, said load bearing body having a length and a first diameter at a first end and a larger second diameter at a second end opposite said first end, said first and second diameters sized to be greater than the space between the adjacent vertebrae, said load bearing body having an outer surface tapered from said first diameter to said second diameter; and

a cap for blocking said opening, said cap having an occlusion body sized and shaped for contacting said opening, and an elongate anchor projecting from said occlusion body, said anchor including a first end attached to said occlusion body and an opposite second end having engaging means for engaging said load bearing body to hold said occlusion body within said opening.

7. The device of claim 6 wherein said outer surface defines a thru-hole in communication with said chamber and said anchor has a length which reaches from said occlusion body to said thru-hole when said cap is inserted into said opening and said lip is engaged within said thru-hole.

8. A tool for manipulating a cap for a hollow interbody fusion device, comprising:

a pair of prongs each having a proximal end defining first engaging means for engaging the fusion device;

a shaft having a first end defining second engaging means for engaging the cap; and

means for slidably supporting said shaft between said prongs.

9. A tool for manipulating a cap for a hollow interbody fusion device, comprising:

a body defining a passageway therethrough;

a pair of prongs each having a distal end attached to said housing and a proximal end having facing engagement surfaces for engaging the fusion device; and

a shaft slidably disposed within said body, said shaft having a first end defining a cap-engaging tip for engaging a tool hole in the cap, said shaft slidable between a retracted position and an extended position at which said first end is adjacent and between said proximal ends of said prongs.

10. The tool of claim 9 wherein said prongs are made of a resilient material.

11. The tool of claim 9 wherein said cap engaging tip defines threads.

12. The tool of claim 9 further comprising:

a pair of releasing members, one of said releasing members disposed on each of said facing engagement surfaces, said releasing members having a height and a width for being insertable into apertures in a body wall in the fusion device.

13. The tool of claim 9 further comprising releasing means for applying pressure to elongate arms of the cap to deflect the arms inwardly to release the cap from the interbody fusion device.

14. The tool of claim 13 wherein said releasing means includes a pair of releasing members, one of said releasing members disposed on each of said facing engagement surfaces, said releasing members having a height and a width for being insertable into apertures in a body wall in the fusion device to disengage the elongate arms from the apertures.

15. The tool of claim 9 further comprising:
a proximal stop member disposed on said shaft adjacent said first end for preventing said first end from entering said passageway.

16. The tool of claim 15 wherein said proximal stop member comprises an O-ring engaged to said shaft.

17. The tool of claim 16 wherein said shaft defines a groove for seating said O-ring.

18. The tool of claim 9 further comprising a distal stop member attached to a second end of said shaft, said distal stop member having a perimeter which is larger than a perimeter of said passageway to prevent said second end of said shaft from entering said passageway.

19. The tool of claim 17 further comprising a distal stop member attached to a second end of said shaft, said distal stop member having a diameter which is larger than a diameter of said passageway to prevent said second end of said shaft from entering said passageway.

20. The tool of claim 9 further comprising a distal shaft manipulating member attached to a second end of said shaft for rotating and sliding said shaft within said passageway.

21. The tool of claim 20 wherein said manipulating member has a dimension that is larger than a perimeter of said passageway to prevent said second end of said shaft from entering said passageway.

22. The tool of claim 21 wherein said manipulating member is a thumb wheel.

23. A fusion device for facilitating arthrodesis in the disc space between adjacent vertebrae, comprising:

a metal body composed of a porous, biocompatible bone ingrowth material having interconnected continuous pores; and

an osteogenic material within the pores of said bone ingrowth material, said osteogenic material including a bone morphogenetic protein.

24. The device of claim 23 wherein said bone morphogenetic protein is a recombinant human protein.

25. The device of claim 24 wherein said bone morphogenetic protein is rhBMP-2, rhBMP-7 or a mixture thereof.

26. The device of claim 23, further comprising a bonding layer provided over said metal body, said layer extending into said pores.

27. The device of claim 26 wherein said bonding layer includes a calcium phosphate composition.

28. The device of claim 27 wherein said calcium phosphate composition comprises hydroxyapatite.

29. The device of claim 28 wherein said calcium phosphate composition further comprises tricalcium phosphate, said calcium phosphate composition being a biphasic ceramic.

30. The fusion device according to claim 23 wherein said porous material is a composite comprising a nonmetallic rigid foam substrate formed by an interconnected network of carbonaceous material defining continuous, interconnected

pores and a metallic film substantially covering said interconnected network.

31. The fusion device according to claim 30 wherein said carbonaceous material is a carbon foam.

32. The fusion device according to claim 30 wherein said metallic film comprises a group VB metal or an alloy of said group VB metal.

33. The fusion device according to claim 32 wherein said metallic film comprises tantalum or an alloy thereof.

34. The device of claim 30 further comprising a bonding layer of a calcium phosphate composition, said calcium phosphate composition layered over said interconnected network.

35. The device of claim 23 wherein said body:

is elongated having a length, a first diameter at a first end and a larger second diameter at a second end opposite said first end, said first and second diameters sized to be greater than the space between the adjacent vertebrae;

said body having an outer surface that is substantially continuously tapered from said first end to said second end with external threads defined on said outer surface and extending substantially entirely along said length of said body.

36. The device of claim 23 wherein said body:

is elongated having a length between a first end and a second end thereof, and a first diameter at said first end sized to be greater than the space between the adjacent vertebrae, said body having an outer surface with a pair of opposite cylindrical portions extending along substantially the entire length of said body and defining said first diameter, and a pair of substantially flat opposite side

walls connected between said opposite cylindrical portions, said side walls extending along a substantial portion of said length of said body.

37. The device of claim 36 further comprising external threads defined on said pair of opposite cylindrical portions of said outer surface and extending along substantially the entire length of said body.

38. The device of claim 37 wherein said cylindrical portions are tapered along a substantial portion of said length and define a second diameter at a second end thereof that is greater than said first diameter.

39. A fusion device for facilitating arthrodesis in the disc space between adjacent vertebrae, comprising:

a hollow load bearing body having an internal surface defining a chamber and an opening in communication with said chamber; and

an osteogenic material placed within said chamber, said osteogenic material including a bone morphogenetic protein in a suitable carrier.

40. The device of claim 39 wherein said bone morphogenetic protein is selected from the group consisting of BMP-1, BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, BMP-8, BMP-9, BMP-10, BMP-11, BMP-12, BMP-13.

41. The device of claim 40 wherein said carrier is selected from the group consisting of calcium sulphate, polylactic acids, polyanhydrides, collagen, calcium phosphates and polymeric acrylic esters.

42. The device of claim 41 wherein said carrier is a sponge.

43. The device of claim 39 wherein said carrier is a biphasic ceramic including hydroxyapatite and tricalcium phosphate.

44. The device of claim 39 wherein said load bearing body comprises a calcium phosphate composition.

45. The device of claim 44 wherein said load bearing body comprises hydroxyapatite.

46. The device of claim 45 wherein said load bearing body comprises biphasic hydroxypatite/tricalcium phosphate.

47. The device of claim 39 further comprising a cap for blocking said opening, said cap including:

an occlusion body sized and shaped for contacting said opening and including,

an outer wall defining osteogenic apertures, said apertures sized to permit bone ingrowth and protein egress,

an opposite inner surface; and

a rim in communication with said outer wall and said inner surface, said rim defining an engaging surface for contacting said opening; and

an elongate anchor projecting from said rim, said anchor including a first end attached to said rim and an opposite second end having a lip, said lip projecting from said second end to contact said internal surface to hold said occlusion body within said opening.

48. The device of claim 47 further comprising a flange projecting from a perimeter of said occlusion body.

49. The device of claim 39 wherein said load bearing body:

is elongated having a length between a first end and a second end thereof, and a first diameter at said first end sized to be greater than the space between the adjacent vertebrae, said load bearing body having an outer surface

with a pair of opposite cylindrical portions extending along substantially the entire length of said load bearing body and defining said first diameter, and a pair of substantially flat opposite side walls connected between said opposite cylindrical portions, said side walls extending along a substantial portion of said length of said load bearing body.

50. The device of claim 48 further comprising external threads defined on said pair of opposite cylindrical portions of said outer surface and extending along substantially the entire length of said load bearing body.

51. The device of claim 49 further comprising a cap for blocking said opening, said cap having:

an occlusion body sized and shaped for contacting said opening; and

an elongate anchor projecting from said occlusion body, said anchor including a first end attached to said occlusion body and an opposite second end having engaging means for engaging said load bearing body to hold said occlusion body within said opening.

52. The device of claim 51 wherein said occlusion body includes an outer wall defining osteogenic apertures sized to permit bone ingrowth and protein egress.

53. The device of claim 51 wherein said engaging means comprises a lip projecting from said second end to contact said internal surface.

54. The device of claim 51 wherein said load bearing body defines a thru-hole in communication with said chamber and said anchor has a length which reaches from said inner surface to said thru-hole when said cap is inserted into said opening and said lip is engaged within said thru-hole.

55. The device of claim 53 wherein said outer wall is flush with said opening when said lip is engaged to the thru-hole.

56. The device of claim 51 further comprising a second elongate anchor projecting from said occlusion body.

57. The device of claim 51 wherein said anchor is composed of a resilient material.

58. The device of claim 51 wherein said cap is composed of a biocompatible polymer.

59. The device of claim 58 wherein said polymer is polyethylene.

60. The device of claim 56 wherein said occlusion body defines a tool hole for receiving a driving tool.